

NCDOT ROADWAY DESIGN PROCEDURES FOR SCOPING AND NEGOTIATIONS

SCOPING AND ESTIMATING

- NCDOT-Roadway Design will obtain all available information on the project and provide to the PEF and all involved units as soon as possible following selection. This should not be less than 1 week prior to scoping.
- Prior to scoping major projects with the PEF, NCDOT personnel involved will meet to discuss the project scope. At this meeting a draft scoping fact sheet prepared by Roadway Design is distributed for review and comments.
- Agreement is prepared, scoping fact sheet updated from comments received at in-house scoping meeting and a package for the PEF is prepared including 2 copies of the agreement, manday estimate forms, and scoping checklist.
- Site visit is scheduled for major projects and held prior to the scoping meeting. The site visit shall be attended by the PEF and NCDOT units involved. The scoping fact sheet is then finalized based on information obtained at site.
- Scoping meeting is held with the PEF and all involved NCDOT units. The PEF will take formal minutes of scoping meeting. Requests for manday estimates are distributed to all involved units. The PEF submits minutes to NCDOT prior to preparing estimate.
- Once the PEF's minutes of scoping meeting are approved, Roadway Design and the PEF will prepare a scoping checklist. This is the basis of the manday and cost estimate. The PEF must obtain approval of the scoping checklist prior to preparing their estimate.
- Once the scoping checklist is approved, NCDOT and the PEF will prepare manday and cost estimates.
- NCDOT will prepare in-house estimates based on the following criteria:
 - 162% overhead.
 - Cost of capital if approved by audit.
 - 2% per year salary escalation for portions of the contract affected, if contract time exceeds 2 years.
 - NCDOT's manday distribution for roadway design is as follows: 9% TES III (Proj. Eng.), 21% TES II (Squad Leaders), 22% TE II (Assistant Squad Leader), 38% TT III (Senior Technician/E.I.T.) and 10% TT I (Entry Level Technician).

- All other NCDOT estimates prepared by other units are calculated based on manhours per task per classification.
- NCDOT's cost for each classification for use in estimating is calculated using actual in-house salary data as follows:

$$\frac{\text{Rate per Classification Used in NCDOT Estimate} \times \text{Average Rate Based on Information Provided by Fiscal per Classification} + \text{Maximum Rate}}{2}$$

- Estimates will be prepared, reviewed and processed according to the following procedure:
 - In-house estimate is prepared by the review squad and reviewed by the Project Engineer.
 - In-house estimates, prepared by all involved units, are sent to the Engineering Coordination Section. The Roadway Design Estimate is compared to other similar projects in our historical data file. The in-house estimate is adjusted if necessary and finalized.
 - Three (3) copies of the PEF's estimate should be sent to the Roadway Design Unit – Engineering Coordination Section Head.
 - One copy of the PEF's estimate is sent to Fiscal for pre-negotiation audit.
 - One copy of the PEF's estimate is sent to all involved NCDOT Units for review and approval.
 - One copy of the PEF's estimate is retained by the Engineering Coordination Section for their record.

NEGOTIATIONS

- A Pre-negotiation audit is received from the NCDOT Fiscal Section.
- Negotiations can begin after the pre-negotiation audit is received from the Fiscal Section.
- If the PEF's manday and cost estimate for each discipline is within a reasonable tolerance of NCDOT's estimate (usually 5% to 25%±), a negotiation meeting will be scheduled.
- If the PEF's manday and cost estimate is more than 50%± of NCDOT's, or if an acceptable fee cannot be negotiated, the contracting officer may elect to terminate the proceedings with the selected firm and begin scoping and negotiating with the firm selected as first alternate.

- If the manday and cost estimate is within a reasonable tolerance, then PEF's estimate is evaluated carefully to ensure efforts estimated by each party for each task are comparable. Tasks with great disparity in effort are noted. Distribution of effort by classification is likewise reviewed and any significant disparities noted. Direct non-salary costs are reviewed.
- A negotiation meeting is scheduled for all parties to resolve disparities in mandays and fees. If differences are small they can be negotiated over the telephone.
- Negotiations are held and each NCDOT representative for a particular discipline discusses differences with the PEF representative to reach agreement on the mandays. The Project Engineer from Roadway Design will be responsible for conducting the meeting, negotiating the roadway design portion and seeing that all disciplines are negotiated fairly. The parties for each discipline, both PEF and NCDOT, listen and discuss the differences with each other. Revisions to estimates may be justified to assure the discipline involved has adequate time allotted to perform the required work. Audit issues are discussed and resolved at this time.
- Once the mandays and direct non-salary items are negotiated within a reasonable tolerance (no greater than 5% overall), the total direct and indirect salary costs must be evaluated. These costs should be no greater than 10% over the NCDOT estimate. If these costs are greater than 10%, further adjustments will be required in either mandays or distribution of time by classification to attain an overall cost that is within acceptable limits established by NCDOT.
- When all disciplines are satisfied that a reasonable and acceptable estimate for effort and costs have been negotiated, the revised proposal package shall be submitted to Roadway Design. It shall contain two executed agreements, three copies of the revised manday and costs package, and a cover letter summarizing the negotiation process and reasons for any adjustments made to mandays and costs.
- The Engineering Coordinator – Roadway Design approves the cost comparison sheet showing initial costs and final costs for both PEF and NCDOT and the percentage difference in cost.
- After the revised proposal package is received by Roadway Design, the contract will be placed on the next Board of Transportation Agenda for approval or for information only (depending on the contract amount).
- Notice to proceed is given to the PEF after approval by the Board of Transportation if the contract amount is greater than \$250,000. If the contract is less than \$250,000, then notice to proceed is given after the contract is signed by the Highway Design Branch Manager.
- NCDOT responds in writing to Fiscal addressing issues concerning pre-negotiation audit.

POINT OF CONTACT – PROJECT CONTROL

All general requests for project information, questions concerning estimating, scope of work changes, or inquiries concerning the project should be directed to the Roadway Design Project Engineer or Squad Leader. The PEF should not directly contact internal units of NCDOT unless directed to do so by the Project Engineer or Squad Leader. This policy is effective throughout the life of the project.